

THE NEARCTIC SPECIES OF *LOPHEPYRIS*, A NEW SUBGENUS OF
RHABDEPYRIS

(HYMENOPTERA, BETHYLIDAE)

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It has not generally been appreciated that the bethylid genera *Rhabdepyris* and *Anisepyris* are closely related and that certain species are, in fact, somewhat annectant between the two groups. These annectant species are, so far as I have been able to determine, all undescribed, and I wish to take this opportunity to describe those which occur in our fauna. It seems to me best to consider these forms as constituting a distinct subgenus and to assign this subgenus to *Rhabdepyris* rather than to *Anisepyris*. The latter group has apparently diverged strongly from certain elements in *Rhabdepyris* in two or three major characters. On the other hand, *Rhabdepyris* exhibits considerably more variation in structure. The species in question appear to have evolved in the direction of *Anisepyris*, but they still remain within the usual conception of the genus *Rhabdepyris*. The groups in question may be separated by the table which follows.

A. Pronotal disc not margined laterally by carinae; third antennal segment of male small, but at least half as long as the second segment and usually not completely consolidated with the fourth segment; male genitalia elongate, the aedeagus slender, the parameres slender and considerably longer than the distance from their base to the base of the parameral plates.

B. Pronotal disc without carinae, more or less rounded anteriorly and laterally; third antennal segment of male seldom much shorter than the second, always distinct and clearly evident.

Rhabdepyris, subgenus **Rhabdepyris** Kieffer

BB. Pronotal disc with a transverse carina anteriorly, the sides rather sharp although not actually carinate; third antennal segment of male 0.5 to 0.8 times the length of the second, closely consolidated with the fourth.

Rhabdepyris, subgenus **Lophepyris**, new subgenus

AA. Pronotal disc margined anteriorly and laterally by carinae; third antennal segment of male not readily visible, less than half the length of the second and forming a mere annulus at the base of the fourth; elements of male genitalia shorter and broader, the parameres not much more than twice as long as their greatest width and not longer than the distance from their base to the base of the parameral plates.

Anisepyris Kieffer

Lophepyris, new subgenus

Type.—*Rhabdepyris (Lophepyris) bridwelli*, new species

Subgeneric characters.—Mandibles with four or five apical teeth. Clypeus short, with a median carina which is arched in profile. Eyes hairy. Male antennae relatively elongate, segment three 0.5 to 0.8 times the length of the second, not

separated from the fourth by a constriction. Pronotal disc margined in front by a strong transverse carina; sides rather sharp, but not actually carinate; posterior margin with or without a transverse preapical groove. Notauli strong, diverging anteriorly and nearly or quite reaching the anterior margin of the mesoscutum. Scutellum with a strong basal groove which is expanded into a pit on each side. Propodeum with five or seven discal carinae. Middle tibiae with or without spines above. Wings fully developed in both sexes, the venation not differing notably from that of *Rhabdepyris* s. str.

Included species.—I have seen five species assignable to this subgenus, and all of them were used in making the preceding generalizations. Three of these species are Central American and known to me from only a few specimens each. For the present I wish to describe only the two species of this group which occur in the United States (both in Texas). The male of only one of these species, *bridwelli*, is known. The females may be separated by the following couplet:

- Head and thorax black, with a weak coppery-green luster; legs blackish,
paler beyond the femora; head relatively narrow, the middle interocular
line 1.3 to 1.5 times the eye height*bridwelli*, n. sp.
Head and thorax bright bluish-green dorsally; legs beyond the coxae
bright ferruginous; head broad, the middle interocular line 1.8 to 1.9
times the eye height*bradleyi*, n. sp.

***Rhabdepyris (Lophepyris) bridwelli*, new species**

Female.—Length 5.0-5.3 mm.; length of fore wing 2.8-3.0 mm. Color black, head and thorax with a weak coppery-green luster, propodeum with a weak bluish cast; palpi light brown; mandibles and antennae reddish-brown; trochanters, tibiae, and tarsi light reddish-brown, the femora varying from brown to nearly black, the coxae black; abdomen shining black, the apical two segments suffused with reddish-brown. Wings hyaline, the veins and stigma light brown. Mandibles with five simple teeth in an oblique series. Clypeus triangularly produced, the carina weakly arched. Front strongly shining, weakly alutaceous, with small, strong punctures which are separated from one another by from 1.5 to 2.5 times their own diameters. Middle interocular line .66 times the transfacial line, 1.3 to 1.5 times the eye height; vertex more or less squared off far above the eye-tops; ocello-ocular line from 1.35 to 1.45 times the width of the ocellar triangle. Antennal scrobes not margined above by a carina. Pronotal disc shining, the punctures widely separated; no evidence of a groove paralleling the posterior margin. Mesoscutum and scutellum moderately shining, distinctly alutaceous, the punctures small and sparse; groove at base of scutellum constricted to a thin line medially. Propodeum with five distinct discal carinae, between which it is somewhat rugose; area between the lateral and discal carinae weakly striate in front, nearly smooth behind; posterior face of propodeum with ridges which are directed upward medially. Middle tibiae strongly spinose above.

Male.—Length 4.5 mm.; length of fore wing 2.6-3.1 mm. Color black, head and thorax often with a faint coppery-green luster; palpi light brown; mandibles ferruginous apically; antennal flagellum brownish-ferruginous; tegulae

brown; coxae black, femora dark brown, trochanters, tibiae, and tarsi light yellowish-brown; tip of abdomen often suffused with brownish. Wings hyaline, the veins and stigma brown. Mandibles with five teeth. Antennae elongate, the first five segments in a ratio of about 20:5:3:17:15, segment four about twice as long as its greatest thickness, segment twelve about three times as long as its greatest thickness. Front shining, distinctly alutaceous, punctures strong, separated from one another by from 0.5 to 1.5 times their own diameters. Middle interocular line .65 to .68 times transfacial line, 1.3 to 1.5 times eye height; ocello-ocular line 1.1 to 1.3 times width of ocellar triangle. Antennal scrobes not margined above by a carina. Pronotal disc alutaceous, somewhat shining, with large, widely separated punctures; anterior transverse carina strong; sides of disc sharply margined, not carinate; posterior margin closely paralleled by a shallow groove. Mesoscutum alutaceous, weakly punctate; groove at base of scutellum rather long and slender. Propodeum with five discal carinae between which there are some weak and irregular transverse rugae. Subgenital plate strongly, arcuately concave apically. Genitalia with the parameres elongate, strongly setose; volsellae with two small setae at the base of the digitus, the cuspis consisting of very slender dorsal and ventral arms; aedeagus simple, slender.

Types.—Holotype ♀, Brownsville, Texas, 1921 (J. C. Bridwell) [U.S. Nat. Mus. no. 64398]. Allotype ♂, same data as type [U.S. Nat. Mus.]. Paratypes: 1 ♀, 20 ♂♂, same data as type; 1 ♂, Brownsville, no further data; 1 ♂, Brownsville, in plane cabin, Sept. 1949; 1 ♂, Laredo, Dec. 1920 (J. C. Bridwell); 1 ♀, 10 mi. S. of Nuevo Laredo, Mexico, Dec. 22, 1940 (G. E. Bohart); 1 ♂, Vera Cruz, Mexico, summer of 1896 (H. Heyde) [U. S. Nat. Mus., Calif. Acad. Sci., Cornell Univ.]. A male from San Salvador in the National Museum may also belong to this species.

***Rhabdepyris (Lophepyris) bradleyi*, new species**

Female.—Length 6.2-8.0 mm.; length of fore wing 3.8-4.3 mm. Head and thorax dark green or bluish-green; propodeum black; gaster brownish, grading in to rufous on the apical one or two segments; mandibles, antennae, and legs beyond the coxae, bright ferruginous; tegulae testaceous. Wing veins light brown, the membrane hyaline except faintly tinged with brown near the veins. Mandibles broad, with five teeth, the basal three of which are quite blunt. Clypeus very short, its median carina strongly arched. Antennal scrobes not margined above by a carina. Front strongly shining, very weakly alutaceous, the punctures strong, separated from one another by from 1 to 2 times their own diameters. Middle interocular line .70 to .73 times the transfacial line, 1.8 to 1.9 times the eye height, the front thus extremely broad; vertex extending far above the eye-tops, somewhat squared off; ocello-ocular line 1.1 to 1.3 times the width of the ocellar triangle. Pronotal disc shining, sparsely punctate, without a groove paralleling the posterior margin. Propodeum with seven discal carinae, but the two carinae close beside the median carina weaker than the others; space between the median carinae and the lateral carinae more or less smooth and shining; posterior face with the transverse ridges turned upward strongly along the midline, mostly obsolete on the upper part of the sides. Middle tibiae strongly spinose above.

Types.—Holotype ♀, Wharton, Texas, June 24, 1917 (J. C. Bradley) [Cornell Univ. no. 3491]. Paratypes: 4 ♀♀, same data as type [Cornell Univ., U. S. Nat. Mus.].

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